

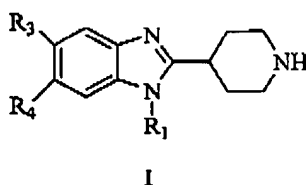
Attorney Docket No: ISIC0055-100 (IBIS-28US)  
Serial No. 10/071, 978

March 17, 2006 Response  
to August 18, 2005 Action

**Listing of the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1.(Currently amended) A compound having formula I:



wherein:

[[\_\_\_\_]]R<sub>1</sub> is alkyl, aryl, arylalkyl, heteroaryl; heteroarylalkyl, heterocycloalkyl, arylsulfonyl, aryloxycarbonyl, alkoxyalkoxyalkyl, alkyl-S-R<sub>7</sub>, alkyl-NH-C(=O)-R<sub>8</sub> or -R<sub>9</sub>-X-R<sub>10</sub>-(R<sub>11</sub>)H;  
[[\_\_\_\_]]wherein each of the alkyl, aryl, arylalkyl heteroaryl, heteroarylalkyl, heterocycloalkyl, arylsulfonyl, aryloxycarbonyl and alkoxyalkoxyalkyl moieties in each of the foregoing R<sub>1</sub> groups can be optionally substituted with up to 5 groups independently selected from the group consisting of C<sub>1</sub>-C<sub>6</sub> alkyl, OH, hydroxyalkyl, -C(=O)-R<sub>5</sub>, CN, aryl, alkoxycarbonyl, alkylaryl, arylalkyl, heteroaryl, S-heteroaryl optionally substituted with halogen, heteroarylalkyl optionally substituted with halogen, heterocycloalkyl optionally substituted with amino, NO<sub>2</sub>, halogen, monohaloalkyl, dihaloalkyl, trihaloalkyl, perhaloaryl, perhaloalkylaryl, alkyl-NR<sub>15</sub>R<sub>16</sub> and NR<sub>15</sub>R<sub>16</sub>;

or one of said alkyl, aryl, arylalkyl heteroaryl, heteroarylalkyl, heterocycloalkyl, arylsulfonyl, aryloxycarbonyl or alkoxyalkoxyalkyl moieties of one of said R<sub>1</sub> groups can be attached to a compound of Formula I at position R<sub>1</sub> thereof;

R<sub>3</sub> and R<sub>4</sub> are independently each halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, trihaloalkyl, alkoxycarbonyl, alkoxy, NR<sub>15</sub>R<sub>16</sub>, or NO<sub>2</sub>, wherein said C<sub>1</sub>-C<sub>6</sub> alkyl, alkoxycarbonyl, and alkoxy groups can each be optionally substituted with NR<sub>15</sub>R<sub>16</sub>;

R<sub>5</sub> is H, -NHNHR<sub>6</sub>, -NHN=CH-R<sub>6</sub>, heteroaryl or heterocycloalkyl, wherein said heteroaryl group can be optionally substituted with an aryl or heteroaryl group;

R<sub>6</sub> is aryl, heteroaryl, arylsulfonyl, heteroarylsulfonyl, -C(=S)-NH-aryl, -C(=S)-

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NH-arylcarbonyl, -C(=S)-NH-heteroarylcarbonyl, -C(=S)-NH-alkylene-R<sub>21</sub>, -C(=O)-NHaryl, -C(=O)-NH-arylcarbonyl, -C(=O)-NH-heteroarylcarbonyl or -C(=O)-NH-alkylene-R<sub>21</sub> where R<sub>21</sub> is carboxy, alkoxycarbonyl, aryl, heteroaryl, heterocycloalkyl, arylaminocarbonyl, cycloalkyl-aminocarbonyl or a saturated hydrocarbon fused ring system optionally having an aryl ring fused thereto, said ring system being optionally substituted with up to three alkyl groups on the alkyl or aryl rings thereof;

wherein any of said R<sub>4</sub> groups can be optionally substituted with up to 3 groups selected from NR<sub>15</sub>R<sub>16</sub>, alkyl, hydroxy, halogen, aryl, alkoxy, trihaloalkoxy, arylalkyloxy, NO<sub>2</sub>, -SH, -S-alkyl, heteroarylcarbonyl, heteroaryl, alkylheteroaryl or a moiety of formula -OC<sub>2</sub>CH<sub>2</sub>-O- attached to adjacent atoms of said R<sub>4</sub> group;

[\_\_\_\_\_]R<sub>7</sub> is heteroaryl or heterocycloalkyl;

[\_\_\_\_\_]R<sub>8</sub> is aryl;

[\_\_\_\_\_]R<sub>9</sub> and R<sub>10</sub> are each independently alkylene having from 1 to about 20 carbons;

[\_\_\_\_\_]X is -N(R<sub>12</sub>)-, -C(R<sub>13</sub>)(R<sub>14</sub>)- or O;

[\_\_\_\_\_]R<sub>11</sub> is H, heteroaryl or alkoxy, wherein said heteroaryl or alkoxy group can be optionally substituted with up to four groups independently selected from halogen, amino, trihaloalkyl, alkoxycarbonyl, and CN;

[\_\_\_\_\_]R<sub>12</sub> is H or C<sub>1</sub>-C<sub>6</sub> alkyl; and

R<sub>13</sub> and R<sub>14</sub> are each independently H or C<sub>1</sub>-C<sub>6</sub> alkyl,

R<sub>15</sub> is H, halogen, C<sub>1-12</sub> alkyl, methylcarbonyl, heterocycloalkyl, arylsulfonyl, heteroarylalkyl, aminoalkyl, arylcarbonyl, branched or straight chain polyaminoalkyl or a group of formula CH<sub>2</sub>(CHOH)<sub>4</sub>CH<sub>2</sub>OH, wherein said methylcarbonyl, heterocycloalkyl, arylsulfonyl, heteroarylalkyl, aminoalkyl, arylcarbonyl and branched or straight chain polyaminoalkyl groups can be substituted by up to 3 OH groups;

[\_\_\_\_\_]R<sub>16</sub> is H, halogen, or C<sub>1</sub>-C<sub>6</sub> alkyl;

or R<sub>15</sub> and R<sub>16</sub> together with the nitrogen atom to which they are attached can form a succinimido or phthalimido group or a fused ring derivative thereof, wherein said succinimido or phthalimido group or fused ring derivative thereof can be optionally substituted by up to three substituents independently selected from NO<sub>2</sub> and halogen;

or R<sub>15</sub> and R<sub>16</sub> together with the nitrogen atom to which they are attached can form a radical of a compound of Formula I wherein said radical is R<sup>1</sup> thereof.

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2.(Canceled)

3.(Previously presented) The compound of claim 1 wherein R<sub>3</sub> and R<sub>4</sub> are each independently halogen, amino, NO<sub>2</sub>, CN, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> alkyl optionally substituted with up to 3 halogen atoms.

4.(Previously presented) The compound of claim 1 wherein R<sub>3</sub> and R<sub>4</sub> are each independently halogen, amino, or NO<sub>2</sub>.

5.(Previously presented) The compound of claim 1 wherein R<sub>3</sub> and R<sub>4</sub> are each independently halogen.

6.(Previously presented) The compound of claim 1 wherein R<sub>3</sub> and R<sub>4</sub> are each chlorine.

7.(Previously presented) The compound of claim 1 wherein R<sub>1</sub> is alkyl substituted with alkoxycarbonyl, alkyl substituted with carboxy, or aralkyl where said aryl portion of said aralkyl is phenyl, pyridinyl, or pyrimidinyl, and where said phenyl, pyridinyl, or pyrimidinyl portion of said arylalkyl group is optionally substituted with up to 5 substituents selected from halogen, monohaloalkyl, dihaloalkyl, trihaloalkyl, NO<sub>2</sub>, alkoxycarbonyl, and alkyl.

8.(Previously presented) The compound of claim 6 wherein R<sub>1</sub> is alkyl substituted with alkoxycarbonyl, alkyl substituted with carboxy, or aralkyl where said aryl portion of said aralkyl is phenyl, pyridinyl, or pyrimidinyl, and where said phenyl, pyridinyl, or pyrimidinyl portion of said arylalkyl group is optionally substituted with up to 5 substituents selected from halogen, monohaloalkyl, dihaloalkyl, trihaloalkyl, NO<sub>2</sub>, alkoxycarbonyl, and alkyl.

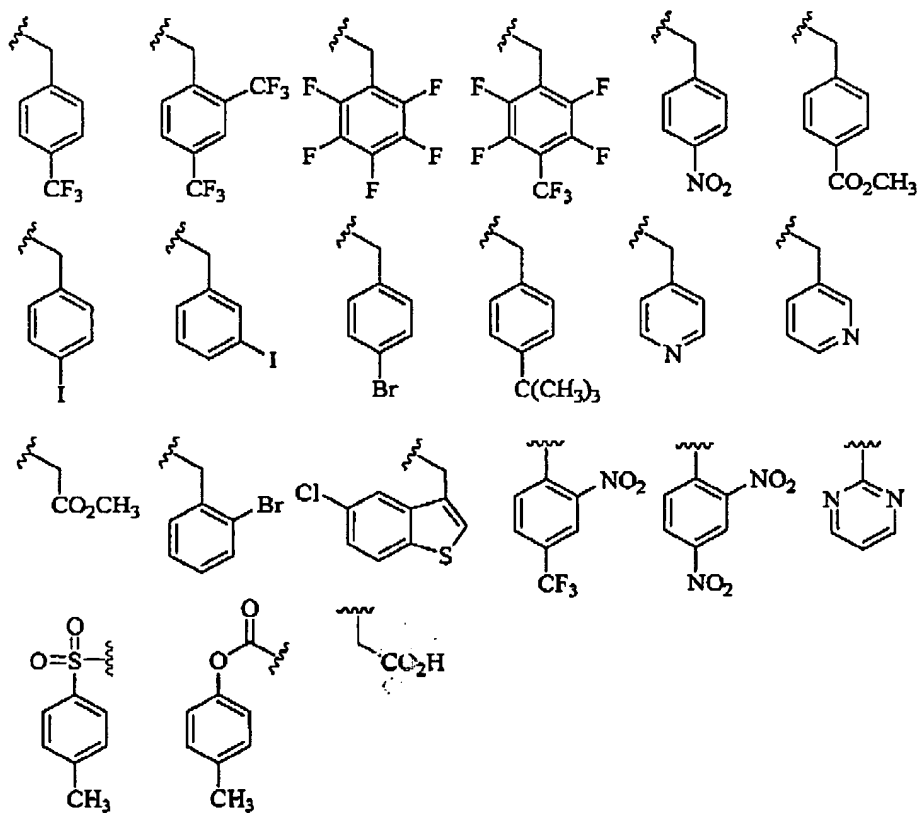
9.(Original) The compound of claim 7 wherein said phenyl, pyridinyl, or pyrimidinyl portion of said arylalkyl group is optionally substituted with up to 5 substituents selected from CF<sub>3</sub>, F, Cl, NO<sub>2</sub>, COOCH<sub>3</sub>, I, Br, and t-butyl.

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10.(Original) The compound of claim 8 wherein said phenyl, pyridinyl, or pyrimidinyl portion of said arylalkyl group is optionally substituted with up to 5 substituents selected from  $\text{CF}_3$ , F, Cl,  $\text{NO}_2$ ,  $\text{COOCH}_3$ , I, Br, and t-butyl.

11.(Previously presented) The compound of claim 1 wherein said  $\text{R}_1$  is selected from the radicals consisting of:



12.(Previously presented) The compound of claim 1 wherein  $\text{R}_1$  is alkyl substituted with - $\text{C}(=\text{O})-\text{R}_5$ .

13.(Previously presented) The compound of claim 12 wherein  $\text{R}_5$  is  $-\text{NHNHR}_6$  or  $-\text{NHN}=\text{CH}-\text{R}_6$ .

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14.(Original) The compound of claim 13 wherein  $R_5$  is  $-NHNHR_6$ .

15.(Original) The compound of claim 13 wherein  $R_5$  is  $-NHN=CH-R_6$ .

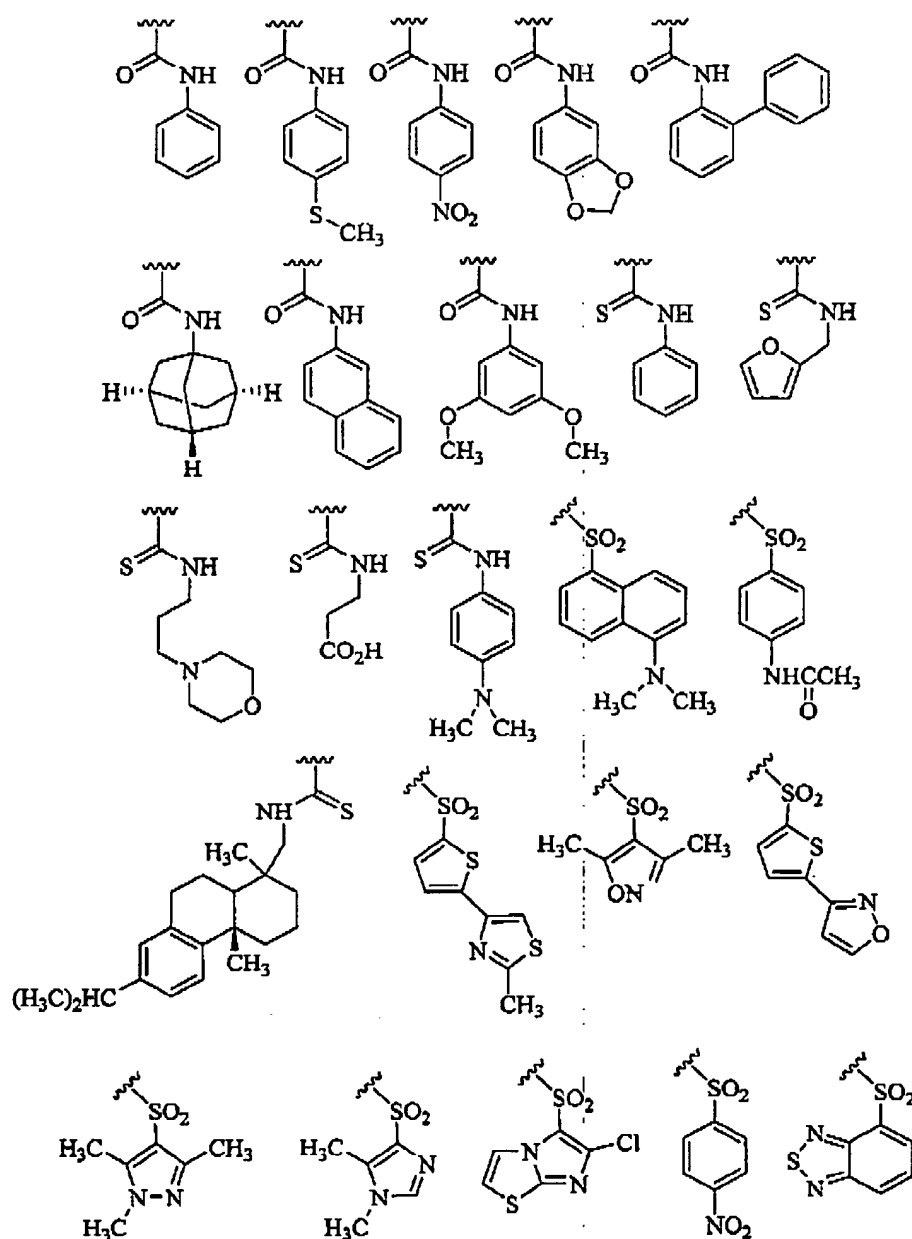
16.(Previously presented) The compound of claim 14 wherein  $R_6$  is  $-C(=O)-NH$ -aryl,  $-C(=O)-NH$ cycloalkyl,  $-C(=S)-NH$ -aryl, arylsulfonyl, heteroarylsulfonyl, heterocycloalkyl, arylaminocarbonyl, cycloalkylaminocarbonyl,  $-C(=S)-NH$ -alkylene- $R_{21}$  where  $R_{21}$  is heteroaryl or a saturated hydrocarbon fused ring system optionally having an aryl ring fused thereto, said ring system being optionally substituted with up to three alkyl groups on the alkyl or aryl rings thereof, wherein any of said  $R_6$  groups can be optionally substituted with up to 3 groups selected from  $NR_{15}R_{16}$ ,  $NO_2$ , a moiety of formula  $-OC_2CH_2-O-$  attached to adjacent atoms of said  $R_6$  group, aryl,  $C_{1-6}$  alkoxy, carboxy, or  $C_{1-6}$  trihaloalkoxy.

17.(Original) The compound of claim 15 wherein  $R_6$  is aryl or heteroaryl optionally substituted with up to 3 groups selected from OH,  $C_{1-6}$  alkoxy,  $NO_2$ ,  $C_{1-6}$  trihaloalkoxy,  $C_{1-6}$  trihaloalkyl, aryl, arylalkyloxy, and a moiety of formula  $-OC_2CH_2-O-$  attached to adjacent atoms of said  $R_6$  group.

18.(Previously presented) The compound of claim 14 wherein said  $R_6$  is any of the radicals from the group consisting of:

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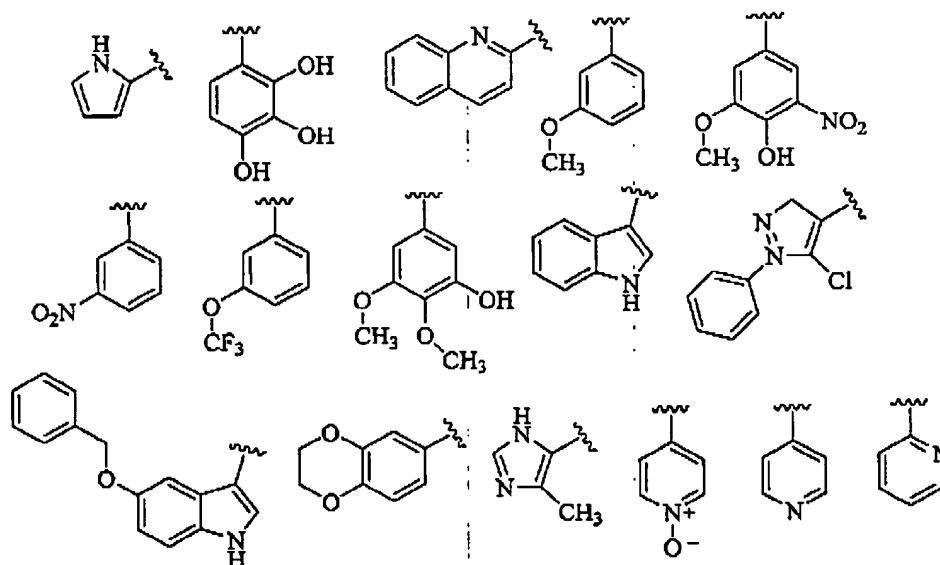
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19.(Previously presented): The compound of claim 15 wherein said R<sub>6</sub> is any of the radicals of the group consisting of:

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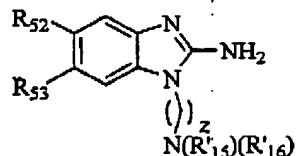


20.(Original) The compound of claim 6 wherein  $R_1$  has the formula  $-(CH_2)_q-L_4$  where  $q$  is 0 to 6 and  $L_4$  is aryl, heteroaryl or heterocycloalkyl, arylsulfonamino, arylcarboxyamino or -S-heteroaryl, where each of said  $L_4$  is optionally substituted with up to three substituents selected from halogen and  $NO_2$ .

21.(Previously presented) The compound of claim 20 wherein said  $L_4$  is N-maleimidyl, N-succinimidyl, N-phthalimidyl, N-naphthalimidyl, N-pyromellitic diimidyl, phenylsulfonamidyl, phenylcarboxamidyl, N-benzopyrrolidinyl, benzimidazol-1-yl, benzimidazol-2-yl, 1,2,4-triazolyl-4-yl, or purinyl, each of said  $L_4$  groups being optionally substituted with 1 or 2 substituents selected from halogen, trihaloalkyl, trihaloalkoxy and  $NO_2$ .

22-62.(Canceled)

63.(Currently amended) A compound of formula:



wherein[[:]]:

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[[\_\_\_\_]]R<sub>52</sub> and R<sub>53</sub> are each independently selected from H, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, trihaloalkyl, alkoxycarbonyl, alkoxy; [[or]]  
[[\_\_\_\_]]R<sub>15</sub> and R<sub>16</sub> together with the nitrogen atom to which they are attached [[can]] form a ~~succinimide or phthalimide~~ N-succinimidyl, N-phthalimidyl, N-maleimidyl, N-naphthalimidyl, N-pyromellitic diimidyl, N-benzopyrrolidinyl or N-benzimidazo-1-yl group or a fused ring derivative thereof, wherein said ~~succinimide or phthalimide~~ group or fused ring derivative thereof can be optionally substituted by up to three substituents independently selected from NO<sub>2</sub> and halogen; and  
z is[[L]] 1 to 6.

64.(Canceled)

65.(Previously presented) The compound of claim 63 wherein z is 2 or 3.

66.(Original) The compound of claim 65 wherein R<sub>52</sub> and R<sub>53</sub> are each independently H, C<sub>1-6</sub> alkyl, alkoxy optionally substituted with dialkylamino, or alkylamino.

67.(Original) The compound of claim 66 wherein R<sub>52</sub> is H.

68.(Original) The compound of claim 67 wherein R<sub>53</sub> is methyl, methoxy, alkoxy optionally substituted with dialkylamino, or alkylamino.

69.(Original) The compound of claim 67 wherein R<sub>53</sub> is OCH<sub>3</sub> or O(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>2</sub>.

70.(Original) The compound of claim 66 wherein R<sub>53</sub> is H.

71.(Original) The compound of claim 70 wherein R<sub>52</sub> is methyl, methoxy, alkoxy optionally substituted with dialkylamino, or alkylamino.

72.(Original) The compound of claim 70 wherein R<sub>52</sub> is OCH<sub>3</sub> or O(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>2</sub>.



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73-106.(Canceled)